## REMARKS

Reconsideration and allowance are respectfully requested.

Claims 1-4 are pending in the application.

Appropriate headings have been added to the specification by this amendment.

Claim 1 stands rejected under 35 USC § 102(b) as being anticipated by Cyb '661. Applicant respectfully traverses this rejection.

The present invention is a method for manufacturing a combustion chamber of a gas-turbine engine. As discussed in the specification, such a combustion chamber requires high strength and high thermal resistance and must be manufactured from materials that retain high strength at the high temperatures to which the combustion chamber is exposed. As discussed at page 1, paragraph 2 of the present specification, in prior attempts to weld combustion chambers from components cast from highly temperature resistant materials, it has been found that the thermal strength of the weld joint is inferior to that of the casting due to the limited thermal strength of the weld filler material. Thus, such combustion chambers did not retain the strength and integrity necessary to operate safely at high temperatures. This, obviously, is critical in a component of an aircraft engine. Therefore, such high temperature alloys have previously been categorized as non-weldable because they could not be welded without a reduction in structural integrity and the welding of such cast alloys to make components requiring high strength at high temperatures has previously been thought impossible. The use of the present invention method of laser welding cast components of such alloys overcomes such limitations and allows the for the cost efficient production of high strength high temperature combustion chambers for gas turbine engines. Claim 1 has been amended to require the use of a high temperature alloy for the cast wall sections.

Cyb, on the other hand, discloses the laser welding of automotive exhaust manifolds. While the exhaust manifold is exposed to high temperatures, the manifold is not required to endure high mechanical stress and the mechanical failure of the manifold, while undesirable, is substantially less significant than the mechanical failure of a combustion chamber of a gas turbine suitable for use in an aircraft. There is no disclosure that the exhaust manifold be

manufactured from a material retaining high strength at a high temperature. Cyb teaches that cast manifold sections can be joined by laser welding, tig welding or the like. See col. 4, lines 35-42 (emphasis added). While the specific alloys of the cast manifold components are not disclosed, by teaching that such components can be joined by the standard method of tig welding, Cyb thus teaches that alloys be used that are weldable by such a method. Therefore, Cyb does not teach or suggest the laser welding of non-weldable high temperature alloys. Further, Cyb actually teaches away from use of high temperature alloys by teaching the use of an alternative manner of dealing with high temperatures. Instead of manufacturing the manifold from a material retaining high strength at high temperatures, Cyb deals with the high temperatures by coating the interior of the manifold with a temperature resistant material to reduce heat exposure to the metal of the manifold.

In view of the above, Cyb does not teach or suggest the present invention as claimed in independent claim 1 and it is respectfully requested that this rejection be withdrawn.

Dependent claims 2-4 are allowable for the reasons given above and for the further limitations contained therein.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance, and such a Notice earnestly solicited. If any points remain in issue, the Examiner is requested to telephone the undersigned at the number below.

Respectfully submitted,

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## APPENDIX

**(Claims With Markings To Show Changes Made)**

1. (Amended) A method for manufacturing a combustion chamber of a gas-turbine engine which comprises a plurality of individual cast wall sections constructed of a high-temperature alloy, comprising:

joining the individual wall sections by laser welding to make up the combustion chamber.